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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 03/28/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

MFES

Office Action Summary	Application No. 09/600,277	Applicant(s) HAMMER ET AL.	
	Examiner Catherine Simone	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because a):b) in line 8 should read a:b.

Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 1, 4 and 11 are objected to because of the following informalities: a):b) should read a:b (claims 1 and 4) and 1.2 should read 1:2 (claim 11). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-12** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by

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raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, **claim 2** recites the broad recitation starch ester, and the claim also recites a starch alkanoate which is the narrower statement of the range/limitation, and the claim also recites starch acetate which further narrows the narrower statement of the range/limitation. **Claim 3** recites the broad recitation hydroxycarboxylic acid units, and the claim also recites a polylactide ...a polyalkylene carbonate which is the narrower statement of the range/limitation. **Claim 4** recites the broad recitation the range from 20:80 to 80:20, and the claim also recites the range from 40:60 to 60:40 which is the narrower statement of the range/limitation. **Claim 5** recites the broad recitation one plasticizer, and the claim also recites glycerol ...sorbitol diester which is the narrower statement of the range/limitation. In addition, **claim 5** recites the broad recitation up to 30% by weight, and the claim also recites up to 15% by weight which is the narrower statement of the range/limitation. **Claim 6** recites the broad recitation one lubricant, and the claim also recites a vegetable fat ... a wax which is the narrower statement of the range/limitation. In addition, **claim 6** recites the broad recitation up to 12% by weight, and the claim also recites from 2 to 6% by weight which is the narrower statement of the range/limitation, and the claim also recites from 3 to 6% by weight which further narrows the narrower statement of the range/limitation. **Claim 7** recites the broad recitation fibers, and the claim also recites fibers from cotton ... from hemp, flax, sisal or jute which is the narrower statement of the range/limitation. In addition, **claim 7** recites the broad recitation up to 25% by

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weight, and the claim also recites from 2 to 15 which is the narrower statement of the range/limitation, and the claim also recites from 5 to 15% by weight which further narrows the narrower statement of the range/limitation. **Claim 8** recites the broad recitation fillers, and the claim also recites calcium carbonate ... anhydrite which is the narrower statement of the range/limitation. In addition, **claim 8** recites the broad recitation up to 12% by weight, and the claim also recites from 2 to 8% by weight which is the narrower statement of the range/limitation, and the claim also recites from 4 to 8% by weight which further narrows the narrower statement of the range/limitation. **Claim 9** recites the broad recitation one crosslinker, and the claim also recites dicarboxylic acid ... siloxane containing vinyl groups which is the narrower statement of the range/limitation. In addition, **claim 9** recites the broad recitation up to 20% by weight, and the claim also recites from 0.5 to 10% by weight which is the narrower statement of the range/limitation, and the claim also recites from 1 to 5% by weight which further narrows the narrower statement of the range/limitation.

The terms "preferably" (**claims 2-9**) and "particularly" (**claims 2 and 6-9**) are relative terms which render the claims indefinite. The terms "preferably" and "particularly" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Appropriate correction is required.

Claims 1 and 4 recite the limitations "the weight ratio" and "the range". There is insufficient antecedent basis for these limitations in the claims. Appropriate correction is required.

Claims 5-9 recite the limitations "the proportion of" and "the total weight of". There is insufficient antecedent basis for these limitations in the claims. Appropriate correction is required.

The recitation "internal preparation and/or external preparation" in **claim 10** is deemed vague and indefinite. Clarification is requested.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. **Claims 1, 2, 4-7, and 9-12** are rejected under 35 U.S.C. 102(e) as being anticipated by Hammer et al. (5,928,737).

Hammer et al. discloses a seamless, tubular food casing which is blown in an area ratio from 1:2 to 1:10 (see col. 2, lines 19-23), produced from a thermoplastic mixture which comprises a) thermoplastic starch (see col. 2, lines 16-18) and b) at least one other polymer (col.

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3, lines 49-52) obtainable by polycondensation or polyaddition, and the weight ratio of a:b being inherently in the range from 90:10 to 10:90 (see col. 3, lines 54-56). Regarding **claim 2**, the thermoplastic starch derivative is inherently a starch ester (see col. 2, lines 9-14). Regarding **claim 4**, the weight ratio of a:b is inherently in the range from 20:80 to 80:20 (see col. 3, lines 54-56). Regarding **claim 5**, note plasticizer (see col. 3, lines 1-4) and a weight percent being up to 30% (see col. 3, lines 8-19). Regarding **claim 6**, note one lubricant (see col. 3, lines 64-67) and a weight percent being up to 12% (see col. 4, lines 3-5). Regarding **claim 7**, note fibers (see col. 3, lines 22-26 and col. 5, lines 1-7) and a weight percent being up to 25% (see col. 4, lines 14-20). Regarding **claim 9**, note crosslinker (see col. 3, lines 60-63) and a weight percent being up to 20% (see col. 3, lines 34-36 and 58-61). Regarding **claim 10**, the food casing is inherently provided with an internal preparation and/or external preparation. Regarding **claim 11**, a process comprising extruding the thermoplastic mixture through an annular die and blowing it in an area ratio of from 1:2 to 1:10 is inherent (see col. 4, lines 34-40). Regarding **claim 12**, note synthetic sausage casing (see col. 1, lines 34-40).

In regards to **claims 1 and 10**, process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA

1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations by polycondensation or polyaddition (**claim 1**) and an internal preparation and/or external preparation (**claim 10**) are methods of production and therefore do not determine the patentability of the product itself.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (5,928,737) in view of Ramesh et al. (6,221,410).

Hammer et al. discloses a seamless, tubular food casing which is blown in an area ratio from 1:2 to 1:10 (see col. 2, lines 19-23), produced from a thermoplastic mixture which comprises a) thermoplastic starch (see col. 2, lines 16-18) and b) at least one other polymer (col. 3, lines 49-52) obtainable by polycondensation or polyaddition, and the weight ratio of a:b being in the range from 90:10 to 10:90. However, Hammer et al. fails to disclose the polymer being of

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a homopolymer or copolymer containing hydroxycarboxylic acid units. Ramesh et al. teaches that it is known in the art to have a polymer being of a homopolymer or copolymer containing hydroxycarboxylic acid units (see col. 12, lines 58-68) for the purpose of producing a tubular food casing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the polymer in Hammer et al. being of a homopolymer or a copolymer containing hydroxycarboxylic acid units as suggested by Ramesh et al. in order to produce a tubular food casing.

In regards to **claim 3**, process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation "by polycondensation" in

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claim 3 is a method of production and therefore does not determine the patentability of the product itself.

9. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (5,928,737) in view of Andra et al. (4,410,011).

Hammer et al. discloses a seamless, tubular food casing which is blown in an area ratio from 1:2 to 1:10 (see col. 2, lines 19-23), produced from a thermoplastic mixture which comprises a) thermoplastic starch (see col. 2, lines 16-18) and b) at least one other polymer (col. 3, lines 49-52) obtainable by polycondensation or polyaddition, and the weight ratio of a:b being in the range from 90:10 to 10:90. However, Hammer et al. fails to disclose fillers. Andra et al. teaches that it is known in the art to have fillers (see col. 13, lines 40-44) for the purpose of producing a tubular food casing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided fillers in Hammer et al. as suggested by Andra et al. in order to produce a tubular food casing.

Conclusion


10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents are cited for further teachings of tubular food casings similar to that instantly disclosed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703) 605-4297. The examiner can normally be reached on 9:00-5:30.

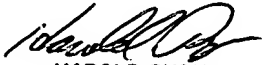
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Catherine Simone
Examiner
Art Unit 1772

March 25, 2002


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

3/25/02